



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0084; Project Identifier MCAI-2020-01312-A]

RIN 2120-AA64

Airworthiness Directives; Pilatus Aircraft Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all Pilatus Aircraft Ltd. (Pilatus) Model PC-24 airplanes. This proposed AD was prompted by a failure of the dual ethernet communication channel on a dual-channel data concentration and processing unit, which triggered the opening of electronic circuit breakers that caused several unintended system activations. This proposed AD would require installing a software (SW) upgrade to the utility management system (UMS), as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference (IBR). The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: (202) 493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For material that is proposed for IBR in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; website: <https://www.easa.europa.eu>. For service information identified in this NPRM, contact Pilatus Aircraft Ltd., Customer Support General Aviation, CH-6371 Stans, Switzerland; phone: +41 848 24 7 365; email: techsupport.ch@pilatus-aircraft.com; website: <https://www.pilatus-aircraft.com>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. The EASA material is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0084.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0084; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the EASA AD, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4059; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-0084; Project Identifier MCAI-2020-01312-A” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this NPRM.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Doug Rudolph, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106. Any commentary

that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2020-0200, dated September 21, 2020 (EASA AD 2020-0200), to correct an unsafe condition on Pilatus Model PC-24 airplanes, all serial numbers.

EASA AD 2020-0200 was prompted by a report that, during climb, a Model PC-24 airplane experienced a dual ethernet communication channel failure on a dual-channel data concentration and processing unit. The failure triggered the opening of electronic circuit breakers, which led to degradation of environmental control system functionalities, the deployment of all passenger oxygen masks, and the autopilot entering into emergency descent mode. According to EASA, various crew alerting system messages were displayed and the functionality of other systems (such as flaps, fuel indication, and the ice protection system) was significantly degraded.

The FAA is proposing this AD to address the failure of the dual ethernet communication channel on a dual-channel data concentration and processing unit. The unsafe condition, if not addressed, could result in an increased pilot workload and reduced control of the airplane.

Related Service Information Under 1 CFR Part 51

The FAA reviewed EASA AD 2020-0200, which specifies upgrading the UMS SW and prohibits installing an earlier version of the SW. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Other Related Service Information

The FAA reviewed Pilatus PC-24 Service Bulletin No. 42-010, dated January 21,

2020. This service information contains procedures for upgrading the UMS SW to Build 7.3.

FAA's Determination

These airplanes have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in the EASA AD. The FAA is issuing this NPRM after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

Proposed AD Requirements in this NPRM

This proposed AD would require accomplishing the actions specified in EASA AD 2020-0200, described previously, as incorporated by reference, except as discussed under "Differences Between this Proposed AD and the EASA AD."

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use some EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities to use this process. As a result, the FAA proposes to incorporate EASA AD 2020-0200 by reference in the FAA final rule. This proposed AD would require compliance with portions of EASA AD 2020-0200, except for any differences identified in the regulatory text of this proposed AD. Service information required by EASA AD 2020-0200 for compliance will be available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0084 after the FAA final rule is published.

Differences Between this Proposed AD and the EASA AD

Where EASA AD 2020-0200 requires compliance after its effective date, this proposed AD would require using the effective date of this AD. Where EASA AD 2020-0200 prohibits the installation of an affected part “from the effective date” of EASA AD 2020-0200, this proposed AD would require using “as of the effective date of this AD.” Although the service information referenced in EASA AD 2020-0200 specifies reporting information to the manufacturer, this proposed AD would not include that requirement.

Costs of Compliance

The FAA estimates that this AD, if adopted as proposed, would affect 42 airplanes of U.S. Registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per airplane	Cost on U.S. operators
Install SW upgrade to UMS	8 work-hours X \$85 per hour = \$680	\$5,000	\$5,680	\$238,560

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Would not affect intrastate aviation in Alaska, and
- (3) Would not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

Pilatus Aircraft Ltd.: Docket No. FAA-2022-0084; Project Identifier MCAI-2020-01312-A

(a) Comments Due Date

The FAA must receive comments on this airworthiness directive (AD) by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pilatus Aircraft Ltd. Model PC-24 airplanes, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 2200, Auto Flight System; 2400, Electrical Power System; 3140, Central Computers (EICAS); 3500, Oxygen System; and 4500, Central Maint, Computer.

(e) Unsafe Condition

This AD was prompted by a failure of the dual ethernet communication channel on a dual-channel data concentration and processing unit, which triggered the opening of electronic circuit breakers that caused several unintended system activations. The FAA is issuing this AD to prevent failure of the dual ethernet communication channel on a dual-channel data concentration and processing unit. The unsafe condition, if not addressed, could result in increased pilot workload and reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) For Group 1 airplanes as defined under the “Definitions” section in European Union Aviation Safety Agency AD 2020-0200, dated September 21, 2020 (EASA AD 2020-0200): Install the build 7.3 standard software upgrade to the utility management system software in accordance with paragraph 1 and the “Ref. Publications” section of EASA AD 2020-0200, except you are required to comply within 30 days after the effective date of this AD. After updating the software, do not install on that airplane utility management system software that is earlier than version 7.3.

(2) For Group 2 airplanes as defined under the “Definitions” section in EASA AD 2020-0200: As of the effective date of this AD, do not install utility management system software that is earlier than version 7.3 on any airplane.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (i)(2) of this AD and email to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about EASA AD 2020-0200, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For

information on the availability of this material at the FAA, call (816) 329-4148. This material may be found in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0084.

(2) For more information about this AD, contact Doug Rudolph, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4059; email: doug.rudolph@faa.gov.

(3) For service information identified in this AD, Pilatus Aircraft Ltd., Customer Support General Aviation, CH-6371 Stans, Switzerland; phone: +41 848 24 7 365; email: techsupport.ch@pilatus-aircraft.com; website: <https://www.pilatus-aircraft.com>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

Issued on January 27, 2022.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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